

DECISION MEMO
Improving Open Woodland Wildlife Habitat
Through
Prescribed Fire

USDA Forest Service, Eastern Region, Mark Twain National Forest
Doniphan-Eleven Point Ranger District
Oregon and Shannon Counties, Missouri
February 2004

Unit Name	Compartment(s)	Stands	Acres	Legal
White Oak	255, 256, 257	C255 – 9, 11, 12 C256 – 41 C257 – 17, 18, 19, 20, 22 23, 24, 25, 26, 27, 70, 71	194	T26N, R3W Section 20
Cook Hollow	233, 234, 235	C233 – 27, 28, 29, 48, 49 50, 51, 52, 53, 54, 72, 73, 74; C234 - 22, 23, 37; C235 – 15, 16, 17, 18, 19, 20, 21, 22, 23, 33, 34, 35, 36, 37, 38, 39, 40, 41, 55, 56	438	T25N, R3W Section 7, 8
J West	150	52, 53, 59, 60, 61, 62, 63, 64, 73, 74, 75, 76, 77	166	T26N, R2W Section 21
Tram Pond	297	21, 23, 24, 25, 26, 32, 33, 34, 35, 36, 37, 38, 56	181	T27N, R3W Section 31

TOTAL – 979 acres

I. DECISION

Based on a thorough analysis documented in the project file, I have decided to implement the proposed action of continued prescribed burning on 979 acres in the locations and units displayed in bold on the previous table. The attached maps display the project areas. Activities that will be implemented through this decision include fire line construction and maintenance and the application of prescribed fire during the appropriate burning period in compliance with site specifically developed burn plans. Individual units will be burned on a 3 to 5 year rotation with the total acreage burned under this decision on an annual basis being approximately 979 acres. Annual accomplishment will be affected by weather, site specific conditions, funding, and other related factors. Annual and cumulative accomplishments will be tracked. Attachment A contains all applicable mitigation measures and monitoring requirements.

A. Project Objectives

I have chosen the proposed action because I believe it is the most efficient and effective way to obtain the following results that improve the forest ecosystem as a whole:

- ✓ Maintain biodiversity
- ✓ Protect the integrity of the Shortleaf pine and oak-pine woodland communities
- ✓ Reduced fuel accumulations, and
- ✓ Maintain quality wildlife habitat.

The objectives of this project are to develop or maintain open woodland conditions, improve diversity, and improve wildlife habitat. Research by Dr. Rich Guyette of the University of Missouri determined that this part of the Ozarks historically burned every 3-15 years. These fires were usually low intensity providing the primary disturbance that created open woodlands described in the accounts of early explorers of southern Missouri. Effective fire suppression over the last 50 years has changed those open woods to the dense forest found today. According to The Nature Conservancy, open shortleaf pine woodlands and oak savannas are now among the most endangered ecosystems in the world.

Federally-listed Threatened & Endangered Species Biological Evaluation

The Biological Evaluation (BE) prepared for this project for federally-listed species determined that implementing these activities may effect but is not likely to adversely affect three federally-listed species: Gray bat (endangered), Indian bat (endangered) and bald eagle (threatened). (Planning Record, BE for Federally-Listed Species, Documents E1, E2, E3). The determination was also made that there would be no effects outside those discussed/evaluated in the programmatic Biological Assessment (BA – September 1998) and Biological Opinion (BO - June 1999). These documents are mentioned in the project BE on P. 3 under “Consultation History”.

Regional Forester’s Sensitive Species (RFSS) Biological Evaluation

Six species require open forest, savanna, and glade habitat and are possibly found on or affected by the proposed prescribed burns. This comprises approximately 7% of the 81 Regional Forester’s Sensitive Species specific to the Mark Twain National Forest (RFSS list of 02/29/2000). This project would maintain or increase potential habitat for the following species: Bachman’s sparrow, royal catchfly, large whorled pogonia, wavy leaf purple coneflower, Baldwin’s milkvine, and Ozark (wake robin) trillium (Planning Record Documents E12, E13).

Management Indicator Species

Prescribed fire would maintain or increase habitat for five of the nine Management Indicator Species associated with the project areas; bobcat, white-tailed deer, eastern wild turkey, raccoon, and indigo bunting. The other four species would not be affected by implementing this project (Planning Record, MIS reviewed by District Wildlife Biologist Keith Kelley).

B. Forest Plan Direction

This project is responsive to the Forest Plan Goals found on pages IV-1 through IV-3 of the Land and Resource Management Plan for the Mark Twain National Forest. Specifically this project responds to the following goals:

Multiple Use Management Goals (IV-1)

- “Develop a cost efficient multiple use program which responds to overall resource demand while effectively resolving or mitigating issues and concerns.”
- “Integrate ecological management principles into Forest resource programs.”
- “Provide a natural appearing environment that accommodates a variety of public use.”

Wildlife Management Goals (IV-2)

- “Manage habitat found on the Mark Twain National Forest to at least maintain viable populations of all existing native and desired non-native vertebrates.”
- “Provide a habitat management program that responds to the demand for both consumptive and nonconsumptive fish and wildlife use.”
- “Provide for wildlife species requiring specialized habitat including those recognized by both Federal and State authorities as being threatened, endangered, rare or sensitive.”

Fire Management Goals (IV-3)

- “Implement prescribed fire as a tool for meeting resource management objectives.”

All of the units to be treated by prescribed fire are in Management Areas 3.4 or 4.1. All of these Management Areas have listed objectives, by Landtype Association, for open and semi-open habitats (see Forest Plan pp. IV-119, 128 and 129) and prescribed burning of these units will help achieve these objectives. In addition, a common wildlife management objective to both of the Management Areas that this project responds to is “Provide habitats for native and naturalized fish and wildlife common to the area...” (Pages IV-118 and 128).

II. REASONS FOR CATEGORICALLY EXCLUDING THE ACTION

A. Category of Exclusion

I have concluded that this action may be categorically excluded from documentation in an environmental impact statement or environmental assessment as it is an action included in Forest Service Handbook 1909.15, Category 6 of Section 31.2 "Categories of Actions for Which a Project or Case File and Decision Memo Are Required". Category 6 includes "wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one mile of low standard road construction...." The selected action is intended to improve wildlife habitat by continuing a program of frequent, low-intensity prescribed burns that will maintain open woodland communities. The variety and amount of food and cover providing plants will be maintained or increase, therefore increasing the quality of habitat for many wildlife species. There is no herbicide use or road construction associated with this decision.

B. Relationship to Extraordinary Circumstances

1. Steep Slopes or Highly Erosive Soils

All soils are rated as having a slight to moderate erosion hazard. Most slopes within the burn units are from 0-10% with some areas reaching approximately 20%. There should be no significant soil related impacts from burning these units. Past burning experience shows that the duff layer is not entirely consumed, leaving an inch or two of organic matter to hold the soil.

2. Threatened and Endangered Species or Their Critical Habitat

The Endangered Species Act requires that federal activities do not jeopardize the continued existence of any species federally listed or proposed as threatened or endangered, or result in adverse modification to such species' designated critical habitat. As required by this Act, potential effects of this decision on listed species have been analyzed and documented in a Biological Evaluation.

For this project we analyzed the impacts to federally listed Threatened and Endangered species that may occur, may be affected by, or have potential habitat in the project area. There is no designated critical habitat on the Doniphan/Eleven Point District or on the Mark Twain National Forest for any federally listed species. Indiana bat, gray bat, and bald eagle were the three listed species evaluated in the Biological Evaluation that could be affected by the project. The BE determined that there would be no effects beyond those previously discussed in the BA/BO (see p. 2, second paragraph) and that the project was not likely to adversely affect these three species. There were "No Effects" on any other federally listed species that may be found in Missouri but are not found within the project area; there would be no effect on the short or long term viability of any Regional Forester sensitive species; and there would be no adverse impacts to State endangered species.

On January 8, 2004 the U.S. Fish and Wildlife Service (USFWS) Wildlife Biologist Teresa Davidson informed District Wildlife Biologist Keith Kelley that the USFWS concurred with the Federal species determinations (Planning Record, Document E1).

3. Floodplains, Wetlands, or Municipal Watersheds -

Floodplains: Executive Order 11988 is to avoid adverse impacts associated with the occupancy and modification of floodplains. Floodplains are defined by this order as, "...the lowland and relatively flat areas adjoining inland and coastal waters including floodprone areas of offshore islands, including at the minimum, that area subject to a one percent or greater chance of flooding in any one year." There are no floodplains within these four burn areas.

Wetlands: Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as "...areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction." There are no wetlands within these four burns.

Municipal Watersheds: Municipal watersheds are designated by Congress, and managed under multiple use prescriptions in forest plans. There is no Congressionally-designated municipal watershed on the Forest. This decision will not affect municipal watersheds.

4. Congressionally Designated Areas -

Wilderness: The Irish Wilderness lies within the Doniphan/Eleven Point District (Forest Plan pages IV-152 and IV-153). All burn units are over five miles from the wilderness. This decision with impacts limited to the immediate area of activity will not affect the Wilderness. Similar past projects on the Doniphan/Eleven Point District were determined to have no significant wilderness-related impacts. This decision should not result in significant impacts to the wilderness values found in the Irish Wilderness.

Wild and Scenic Rivers: The Eleven Point National Scenic River lies within the Doniphan/Eleven Point District (Forest Plan pages IV-201 through IV-205a). There are no burns planned within the designated river corridor and the closest prescribed burns authorized by this decision are approximately ten miles away from the river corridor. This decision, with impacts limited to the immediate area of activity, will not affect the national scenic river. Similar past projects on the Doniphan/Eleven Point District were determined to have no significant wild and scenic river-related impacts. This decision should not result in significant impacts to the "outstandingly remarkable values" for which the Eleven Point National Scenic River was designated.

National Parks: The Ozark National Scenic Riverways, administered by the National Park Service, is adjacent to the Doniphan/Eleven Point District. Management of the Riverways includes the use of prescribed fire to maintain and enhance the natural ecological conditions of the area. This decision is consistent with the ecological management philosophy supporting the use of prescribed fire within the Riverways. All of the burn units authorized by this decision are over nine miles away from the Park. Potential impacts to Riverways resources were considered during analysis of the effects of this project. This decision, with impacts limited to the immediate area of activity, will not affect the National Scenic Riverways. Similar past projects on the Doniphan/Eleven Point District were determined to have no significant impacts to the National Scenic Riverways. This decision should not result in significant impacts to the Ozark National Scenic Riverways.

Greer Spring Special Management Area: The **Greer Spring Acquisition and Protection Act of 1991** authorized the purchase and establishment of an area of about 4,098 acres to be managed in accordance with the provisions of the Act (Forest Plan, pages IV-215 and IV-216). There are no burns planned within the Greer Spring Special Management Area and the closest prescribed burn authorized by this decision is over four miles away from this area. This decision, with impacts limited to the immediate area of activity, will not affect the Greer Spring Special Management Area. Similar past projects on the Doniphan/Eleven Point District were determined to have no significant impacts to the Greer Spring Special Management Area. This decision should not result in significant impacts to the Greer Spring Special Management Area.

Wilderness Study Areas: There are no Wilderness Study areas on the Forest. This decision will not affect Wilderness Study Areas. The release language in the Paddy Creek Wilderness Act, January 3, 1983, precludes the evaluation of additional Wilderness during the 10-15 year Forest Plan period. Public Law 97-407 states: "(4) unless expressly authorized by Congress the Department of Agriculture shall not conduct any further statewide roadless area review and evaluation of National Forest System lands in the State of Missouri for the purpose of determining their suitability for inclusion in the National Wilderness Preservation System." (Forest Plan FEIS, page III-23)

National Recreation Areas: There are no National Recreation Areas on the Forest. This decision will not affect National Recreation Areas.

5. Inventoried Roadless Areas -

The Irish Wilderness Excluded Lands are an area of approximately 1,040 acres set aside by Congress from the Irish Wilderness that permits mineral exploration (Forest Plan, pages IV-211 and IV-212). Wilderness management prescriptions are applied to these lands except as modified for mineral exploration and development. Activities implemented under this decision are not within this area. This decision should not result in any roadless area-related impacts.

6. Research Natural Areas -

There are no Research Natural Areas on the Forest. (Forest Plan FEIS, pages III – 25,26) There are nine areas on the Forest that the Forest Plan FEIS recommends for study as Research Natural Areas. Two of these areas, Tupelo Gum Pond and Cupola Pond, are on the Doniphan/Eleven Point District. No determination has been made concerning designation of these areas as Research Natural Areas but they continue to be managed under the direction of Management Area 8.1 prescriptions which affords them protection as “special areas”. None of the prescribed burning authorized by this decision is within one mile of either of these areas. This decision, with impacts limited to the immediate area of activity, will not affect Research Natural Areas.

7. Native American Religious or Cultural Sites, Archaeological Sites, or Historic Properties or Areas -

Section 106 of the National Historic Preservation Act requires federal agencies take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in the National Register. Section 106 of the National Historic Preservation Act also requires federal agencies to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered in federal lands. It affords lawful protection of archaeological resources and sites that are on public and Indian lands. The Native American Graves Protection and Repatriation Act covers the discovery and protection of Native American human remains and objects that are excavated or discovered in federal lands. It encourages avoidance of archaeological sites that contain graves through “in situ” preservation, but may encompass other actions to preserve these remains and items. This decision complies with the cited Acts. Surveys were conducted for Native American religious or cultural sites, archaeological sites, and historic properties or areas that may be affected by this project (Planning Record – Document G1). Consultation occurred with concurrence by the State Historic Preservation Office on December 8, 2003 (J West Prescribed Burn), January 28, 2004 (Tram Pond Prescribed Burn), and February 9, 2004 (White Oak Prescribed Burn). A survey, subsequent consultation and request for a finding of No Adverse Effect was sent to the State Historic Preservation Office on February 17, 2004 for Cook Hollow Prescribed Burn. (Planning Record, Document D1, D2, D3, D4). Similar past projects in this area were determined to have no significant impact to Native American religious or cultural sites, archaeological sites or historic properties or areas. This decision should not result in significant impacts to such resources.

III. PUBLIC INVOLVEMENT

The proposed action was developed with regard to issues and concerns identified through public involvement and discussion with resource specialists. A scoping letter was mailed to the public on January 9, 2004. The scoping letter was also posted on the Mark Twain National Forest website at:

<http://www.fs.fed.us/r9/marktwain/projects/project.htm>

Scoping comments were requested by January 23, 2004 giving 14 days to receive and respond. Three responses were received. These were reviewed to determine if there were any significant issues related to implementation of the proposed action. Issues identified for this project included:

1. Determining whether these prescribed burns are the appropriate tool and at the frequency with which they applied.
2. Determining whether the time given for responding with comments was adequate.
3. Assuring that landline surveys are complete and property lines are clearly delineated to assure prescribed burns are applied to national forest land and not adjacent private land.
4. Monitoring effects of prescribed burning on various resources
5. Potential for air quality degradation
6. Effects on soil productivity and potential for erosion as a result of prescribed burning.

The ID Team and I reviewed all comments received. Project design, including the mitigation measures and monitoring requirements (Attachment A) and the consultation and concurrence from the appropriate regulatory agencies convince me that all public issues have been thoroughly considered and adequately addressed.

IV. FINDINGS RELATED TO OTHER LAWS AND REGULATIONS

This decision will comply with all applicable laws and regulations. I have summarized some below:

Forest Plan Consistency (National Forest Management Act) - This Act requires the development of long-range land and resource management plans. The Mark Twain Forest Plan was approved on June 23, 1986, as required by this Act. The plan provides for guidance for all natural resource management activities on the Forest. The Act requires all projects and activities be consistent with the Forest Plan. The Forest Plan has been reviewed in consideration of this project. This decision is responsive to guiding direction contained in the Plan, as summarized in Section I of this document. This decision is consistent with the standards and guidelines contained in the Forest Plan (Planning Record, Document E5).

Vegetation Manipulation (National Forest Management Act) - This Act and its implementing regulations require that vegetation manipulation of tree cover for any purpose must comply with seven requirements found at 36 CFR 219.27(b).

Decision Memo

Improvement of Wildlife Habitat Through Prescribed Fire

1. Be best suited to the goals in the Forest Plan. The applicable goals are stated in the Section I of this document. This decision is responsive to those goals and is best suited to meet those goals (Planning Record, Document E5).

2. Assure that technology and knowledge exists to adequately restock lands within five years after treatment, except where permanent openings are created for wildlife habitat improvement, vistas, recreation uses, and similar practices.

Restocking is not applicable; no regeneration harvest is proposed and a primary prescribed burning objective is to improve wildlife habitat.

3. Not to be chosen primarily because they give the greatest dollar return or the greatest output of timber (although these factors shall be considered).

This decision was based on a variety of reasons. It was not chosen for its expected dollar return (Planning Record, Document C2).

4. Be chosen after considering potential effects on residual trees and adjacent stands. The effects on residual trees and adjacent stands have been considered. The overall direction, Standards, and Guidelines contained in the Forest Plan are designed to provide the desired effects of management practices on the resource values. This decision is consistent with the Forest Plan and provides the desired effect on residual trees and adjacent stands (Planning Record, Document C2).

5. Be selected to avoid permanent impairment of site productivity and to ensure conservation of soil and water resources. This decision avoids impairment of site productivity. The nature of the project and use of mitigation measures will protect soil and water resources (Planning Record, Documents C2, C3, E5).

6. Be selected to provide the desired effects on water quality and quantity, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation users, aesthetic values, and other resource yields. This decision provides the desired effect on the above resources. The overall direction, Standards, and Guidelines contained in the Forest Plan are designed to provide the desired effects of management practices on the other resource values. This decision is consistent with the Forest Plan and provides the desired effect on the above resources (Planning Record, Documents C2, C3, E5-E8, F3-F11).

7. Be practical in terms of transportation and harvesting requirements and total costs of preparation, logging, and administration. The project area is adequately roaded; no new permanent or temporary roads are necessary to implement this decision. The treatment in this decision is appropriate to accomplish project objectives, and is economically practical.

Endangered Species Act – See Section II, Item B2 of this document.

Sensitive Species (Forest Service Manual 2670) - This Manual direction requires analysis of potential impacts to sensitive species, those species for which population viability is a concern. On February 29, 2000, the Regional Forester approved the sensitive species list. Potential effects of this decision on sensitive species have been analyzed and documented in a Biological Evaluation (Planning Record – Documents F6, F7, F8). This decision will have “beneficial impact” or “no impact” on sensitive species.

Clean Water Act - This Act is to restore and maintain the integrity of waters. The Forest Service complies with this Act with Best Management Practices. This decision incorporates Best Management Practices to ensure protection of soil and

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Improvement of Wildlife Habitat Through Prescribed Fire

water resources, in compliance with this Act (Planning Record, Documentation C2, C3, E5).

Wetlands (Executive Order 11990) – See Section II, Item B3 of this document.

Floodplains (Executive Order 11988) – See Section II, Item B3 of this document.

Clean Air Act – under this Act, areas of the country were designated as Class I, II, or III airsheds for Prevention of Significant Deterioration purposes. Class I areas generally include national parks and wilderness areas. Class I provides the most protection to pristine lands by severely limiting the amount of additional human-caused air pollution that can be added to these areas. Hercules Glade Wilderness on the Ava/Cassville/Willow Springs District is the only Class I airshed on the Forest. All of the prescribed burn units are over 80 miles from Hercules Glade Wilderness. The remainder of the Forest, including all of this project area, is classified as Class II airsheds. No areas on the Forest have been designated as Class III at this time.

Federal Cave Resources Protection Act - This Act is to secure, protect, preserve, and maintain significant caves, to the extent practical. Site features and field review substantiates that there is only one small, dry cave known to be present in the decision area. This cave will not be affected by this decision (Planning Record, Document F6). White's Creek Cave is located in the Irish Wilderness over eleven miles from the closest prescribed burn unit authorized by this decision. Mitigation measures are in place to mitigate impacts from smoke at the cave (Mitigation Measures, Attachment A).

National Historic Preservation Act - See Section II, Item B7 of this document.

Archaeological Resources Protection Act - See Section II, Item B7 of this document.

Native American Graves Protection and Repatriation Act - See Section II, Item B7 of this document.

American Indian Religious Freedom Act – This Act protects American Indians' inherent right of the freedom to believe, express, and exercise their traditional religions. The federal government has trust responsibilities to Tribes under a government-to-government relationship to insure that the Tribes reserved rights are protected.

No tribal concerns were identified for this project.

Environmental Justice (Executive Order 12898) - This Order requires consideration of whether projects would disproportionately impact minority or low-income populations. This decision complies with this Act. Public involvement occurred for this project, the results of which I have considered in this decision-making. Public involvement did not identify any adversely impacted local minority or low-income populations. This decision is not expected to adversely impact minority or low-income populations (Planning Record, Document C2).

National Environmental Policy Act - This Act requires public involvement and consideration of potential environmental effects. The entirety of documentation for this decision supports compliance with this Act.

V. ADMINISTRATIVE REVIEW OR APPEAL

This decision is not subject to appeal pursuant to 36 CFR 215.12(f).

VI. IMPLEMENTATION DATE

Implementation of this project may begin immediately.

CONTACT PERSON: Ben Wyatt, Doniphan/Eleven Point Ranger District, at Rt.1 Box 1908, Winona, MO 65588 can supply further information about the decision. The phone number is (573) 325-4233. FAX (573)325-4325 e-mail bw Wyatt@fs.fed.us

Jerry Bird

JERRY BIRD
District Ranger

02/27/04

DATE

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Attachment A
Mitigation Measures and Monitoring Requirements
Improvement of Open Woodland Wildlife Habitat
through
Prescribed Burning

1. System roads (if any) used as a fireline for the four prescribed burns (Cook Hollow, White Oak Hollow, J West, and Tram) in this Decision Memo will only be cleared by hand (rake or leafblower) to minimize surface disturbance (no bulldozer scraping to be done). Any trail (other than designated recreation trails), woods road, or non-system roads may be cleared either by hand (rake or leafblower) or by bulldozer based on an assessment of the specific needs of that location prior to burn ignition. It is expected that old dozerline (fireline previously constructed with a bulldozer) will be cleared with a dozer. Consult with archaeologist prior to line-clearing for these units.
2. New constructed fireline will be seeded with an annual cover crop, fertilized, and waterbarred as necessary as soon as practical after construction.
3. Old constructed firelines no longer being used will be seeded with an annual cover crop, fertilized and waterbarred where necessary.
4. A list and tentative schedule of burns will be available at the annual coordination meeting between MDC, NPS, and USFS. Sharing of resources for prescribed burning will be discussed at that meeting.
5. Snags that are 10" diameter or greater and that are within 50 feet of a fireline will be raked around to decrease the possibility of burning them or felled, as the situation dictates for safety.
6. Evaluations will be done for each prescribed burn as soon as practical after the burn is completed.